

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A method for accelerating a destruction of a vortex formed at a rear of a wing of an aircraft by a merging of first and second co-rotating eddies, the method comprising:

generating a periodic perturbation adjacent an area of creation of the first eddy, the periodic perturbation having a predetermined wavelength capable of exciting that excites at least one internal instability mode of a core of the first eddy.

Claim 2 (Previously Presented): The method according to claim 1, wherein the periodic perturbation is generated in an area adjacent a flap of the wing.

Claim 3 (Withdrawn): The method according to claim 2, further comprising:
extending a perturbation device from the area adjacent the flap of the wing; and
retracting the perturbation device into one of the wing and the flap.

Claim 4 (Withdrawn): The method according to claim 2, further comprising:
extending an unstreamed element from the area adjacent the flap of the wing; and
retracting the unstreamed element into one of the wing and the flap.

Claim 5 (Withdrawn): The method according to claim 4, wherein the unstreamed element has one of a circular and an elliptical cross section.

Claim 6 (Original): The method according to claim 2, further comprising:
emitting a jet of fluid from the area adjacent the flap of the wing.

Claim 7 (Currently Amended): A method for accelerating a destruction of a vortex formed at a rear of a wing of an aircraft by a merging of first and second co-rotating eddies, the method comprising:

emitting a jet of fluid transverse to a direction of travel of the aircraft, the jet of fluid causing a periodic perturbation having a predetermined wavelength capable of exciting that excites at least one instability mode of the first eddy.

Claim 8 (Original): The method according to claim 7, wherein the jet of fluid is emitted at a velocity at least equal to a velocity of the aircraft.

Claim 9 (Previously Presented): The method according to claim 8, wherein the jet of fluid is emitted from one of the wing and a flap of the aircraft.

Claim 10 (Currently Amended): A method for accelerating a destruction of first and second contra-rotating vortices formed at a rear of first and second wings of an aircraft, the first contra-rotating vortex being formed by a merging of first and second co-rotating eddies, and the second contra-rotating vortex being formed by a merging of third and fourth co-rotating eddies, the method comprising:

generating a first periodic perturbation adjacent an area of creation of the first eddy, the first periodic perturbation having a first predetermined wavelength capable of exciting that excites at least one internal instability mode of a core of the first eddy; and

generating a second periodic perturbation adjacent an area of creation of the third eddy, the second periodic perturbation having a second predetermined wavelength capable of exciting that excites at least one internal instability mode of a core of the second third eddy.

Claim 11 (Currently Amended): The method according to claim 10, wherein the first and second periodic perturbations are generated such so that diameters of the first and second vortices are greater than a predetermined proportion of a distance between the first and second vortices.

Claim 12 (Currently Amended): The method according to claim 11, wherein the first and second periodic perturbations are generated such so that the diameters of the first and second vortices are greater than about 30% of the distance between the first and second vortices.

Claim 13 (Previously Presented): The method according to claim 12, wherein the first and second periodic perturbations are generated in areas adjacent first and second flap flaps of the first and second wings.

Claim 14 (Withdrawn): The method according to claim 13, further comprising:
extending first and second perturbation devices from the areas adjacent the first and second flaps of the first and second wings; and
retracting the first and second perturbation devices.

Claim 15 (Withdrawn): The method according to claim 13, further comprising:
extending first and second unstreamed elements from the areas adjacent the first and second flaps of the first and second wings; and
retracting the first and second unstreamed elements.

Claim 16 (Withdrawn): The method according to claim 15, wherein the unstreamed element has elements have one of a circular and an elliptical cross section.

Claim 17 (Original): The method according to claim 13, further comprising:
emitting first and second jets of fluid from the areas adjacent the first and second flaps
of the first and second wings.

Claim 18 (Previously Presented): The method according to claim 1, wherein the
periodic perturbation corresponds to a Benard-von Karman instability.

Claim 19 (Previously Presented): The method according to claim 1, wherein the
periodic perturbation induces an increase in three-dimensional elliptic instabilities.

Claim 20 (Withdrawn): The method according to claim 3, wherein the perturbation
device has a diameter transverse with respect to a flow around the wing and the diameter
depends on the wavelength of the periodic perturbation.

Claim 21 (Withdrawn): The method according to claim 4, wherein the unstreamed
element has a diameter transverse with respect to a flow around the wing.

Claim 22 (Withdrawn): The method according to claim 4, wherein the unstreamed
element has an elliptical cross section.

Claim 23 (Previously Presented): The method according to claim 7, wherein the
periodic perturbation corresponds to a Benard-von Karman instability.

Claim 24 (Previously Presented): The method according to claim 7, wherein the jet of fluid is emitted from a flap of the aircraft.

Claim 25 (Previously Presented): The method according to claim 7, wherein the periodic perturbation induces an increase in three-dimensional elliptic instabilities.

Claim 26 (Previously Presented): The method according to claim 7, wherein, when the jet of fluid is emitted orthogonally to a flow around the wing, a velocity of the jet of fluid must be at least equal to a velocity of the aircraft.

Claim 27 (Previously Presented): The method according to claim 10, wherein the first and second periodic perturbations correspond to Benard-von Karman instabilities.

Claim 28 (Previously Presented): The method according to claim 10, wherein the first and second periodic perturbations induce an increase in core diameters of the co-rotating eddies.

Claim 29 (Withdrawn): The method according to claim 15, wherein the unstreamed elements have elliptical cross sections.

Claim 30 (Previously Presented): The method according to claim 10, wherein the first and second periodic perturbations induce increases in three-dimensional elliptic instabilities.

Claim 31 (Previously Presented): The method according to claim 10, wherein the internal instability mode to be excited is determined from a ratio between the sizes of the cores of the eddies and the distance between the eddies.